

ABSTRACT

Disclosed is a method of manufacturing a semiconductor device. In ion implantation process for controlling the threshold voltage of the transistor or the semiconductor device such as a flash memory cell, the dose of the impurity capable of securing the uniformity is implanted by minimum. The retained dose of the impurity is controlled by out gassing the implanted impurity by means of a cleaning process. Therefore, a uniform distribution characteristic of the implanted impurity could be obtained. A transistor or a flash memory cell of a low operating voltage could be manufactured.